

IN THE CLAIMS:

Please amend the claims, as follows:

Claims 1-28 (canceled).

29. (currently amended) An operating head for automatic machine tools comprising:

a first support adapted for rotation about a first axis and mounted on a structure movable in a set of three Cartesian axes;

a second support rotatably mounted to the first support for rotation about a second axis orthogonal to the first axis;

an interchangeable chuck unit, mounted to project from the second support;

a power transmission system having a coupling connected to a drive connected to a chuck of said chuck unit;

first means for controlling rotation of the second support about the second axis; and

~~second~~ locking means for selectively locking the second support against rotation about the second axis.

30. (currently amended) An operating head according to claim 29, wherein the ~~second~~ locking means comprises a chamber having walls made of a deformable material and fluid means for introducing a pressurized fluid into the chamber to deform the walls and frictionally lock the second support.

31. (currently amended) An operating head for automatic machine tools, comprising:

a first support rotatably fitted on a structure, the first support rotatable around a first axis, the structure movable along a set of three Cartesian axes;

a second support fitted to the first support, the second support being rotatable around a second axis;

an interchangeable chuck unit projecting from the second support;

first means for controlling the rotation of the second support around the second axis;

and

second locking means for locking the second support in a rotated position, the second locking means including a chamber having walls made of a deformable material fitted around the second support, the chamber connected to a fluid means for introducing a pressurized fluid into the chamber for deforming the chamber walls and locking the second support in the rotated position.

32. (previously presented) An operating head according to claim 31, wherein the interchangeable chuck unit is one of a motorized chuck and a power chuck.

33. (new) An operating head for an automatic machine tool having a structure movable along a set of three Cartesian axes, the operating head comprising:

a first support rotatably fitted to the structure for rotation about a first axis;

a chuck unit fitted to the first support, the chuck unit projecting from the first support and being rotatable to different angular positions around a second axis, the chuck unit being removable from the first support and having a chuck for holding a tool;

the first support includes a power transmission system and means for connecting the power transmission system to the chuck unit; and

a rotating support fitted to the first support, the chuck unit being mounted on the rotating support, and the rotating support controllable by means for controlling rotation of the rotating support around the second axis.

34. (new) An operating head according to claim 33, wherein the power transmission system comprises a drive having shafts and bevel gear pairs, connected on one side to a motor system of the structure, and having a coupling on the other side for connection to kinematic devices provided on the chuck unit.

35. (new) An operating head according to claim 34, further comprising a ring-shaped chamber connected at one side to exhaust devices and on the other side to a duct terminating adjacent the coupling of a tool, the ring-shaped chamber fitted to the structure.

36. (new) An operating head according to claim 35, wherein the duct is connected to the ring-shaped chamber by a rapid coupling, the duct being integral with and rotatably connected to the chuck unit.

37. (new) An operating head according to claim 33, further comprising a chamber having walls made of a deformable material fitted around the rotating support, the chamber being connected to fluid means for introducing a pressurized fluid into the chamber.